

CLAIMS:

1. An electrical connector, comprising:
a dielectric housing having a receptacle for receiving a complementary mating connector;
a plurality of conductive terminals mounted on the housing and having contact portions exposed in the receptacle for engaging appropriate contacts of the mating connector;
a metal shell about at least a portion of the housing;
a shutter plate movably mounted on the housing for movement between a closed position substantially closing said receptacle to prevent inadvertent engagement of foreign objects with the contact portions of the terminals and an open position allowing mating of said complementary mating connector, at least a portion of the shutter plate being conductive to dissipate static electricity at the receptacle; and
at least one spring mounted on the housing for biasing the shutter plate toward its closed position, the spring being conductive and electrically coupled between the conductive portion of the shutter plate and the metal shell to ground the plate to the shell.
2. The electrical connector of claim 1 wherein said spring comprises a coil spring having opposite ends maintained in engagement with the conductive portion of the shutter plate and the metal shell.
3. The electrical connector of claim 2 wherein said shutter plate is elongated, and including a pair of said coil springs located at opposite ends of the elongated shutter plate.
4. The electrical connector of claim 1 wherein said shutter plate includes a dielectric core and said conductive portion of the shutter plate comprises a metal cover over at least part of the dielectric core.
5. The electrical connector of claim 4 wherein said dielectric core of the shutter plate includes an inside face which faces the contact portions of the terminals.
6. The electrical connector of claim 1 wherein at least one of said terminals is provided as a ground terminal and is in engagement with the conductive portion of the shutter plate, thereby coupling the ground terminal, via the conductive spring, to the metal shell.
7. The electrical connector of claim 6 wherein said conductive portion of the shutter plate includes a foot extending into engagement with said at least one ground terminal.

8. An electrical connector, comprising:
a dielectric housing having a receptacle for receiving a complementary mating connector;
a plurality of conductive terminals mounted on the housing and having contact portions exposed in the receptacle for engaging appropriate contacts of the mating connector;
5 a metal shell about at least a portion of the housing;
a shutter plate movably mounted on the housing for movement between a closed position substantially closing said receptacle to prevent inadvertent engagement of foreign objects with the contact portions of the terminals and an open position allowing mating of
10 said complementary mating connector, at least a portion of the shutter plate being conductive; and
grounding means coupled to said at least a portion of the shutter plate for dissipating static electricity at the receptacle.

9. The electrical connector of claim 8 wherein said grounding means is electrically coupled between the conductive portion of the shutter plate and the metal shell to ground the plate to the shell.

10. The electrical connector of claim 8, including spring means mounted on the housing for biasing the shutter plate toward its closed position.

11. The electrical connector of claim 8 wherein said shutter plate includes a dielectric core and said conductive portion of the shutter plate comprises a metal cover over at least part of the dielectric core.

12. The electrical connector of claim 11 wherein said dielectric core of the shutter plate includes an inside face which faces the contact portions of the terminals.

13. The electrical connector of claim 8 wherein at least one of said terminals is provided as a ground terminal and is in engagement with the conductive portion of the shutter plate.

14. The electrical connector of claim 13 wherein said conductive portion of the shutter plate includes a foot extending into engagement with said at least one ground terminal.